

Chapter 102

Report on Global Environment

Competitiveness of New Zealand

New Zealand is an island country located in the southwestern Pacific Ocean. New Zealand is situated some 1,500 km east of Australia across the Tasman Sea and the coastline is 15,134 km. It covers 263.3 thousand of square kilometers and has a population of 4.405 million. Its GDP reaches \$159.71 billion in 2011. Through the index system and evaluation model, the environment competitiveness index of New Zealand ranks at 4 in 133 countries.

Score:
57.67
Rank:
4

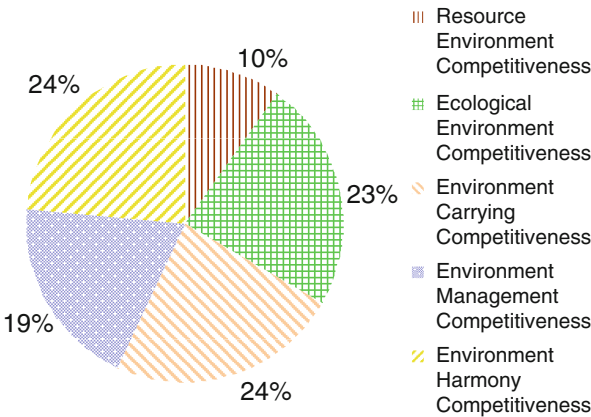


Fig. 102.1 Contribution of sub-index of GEC

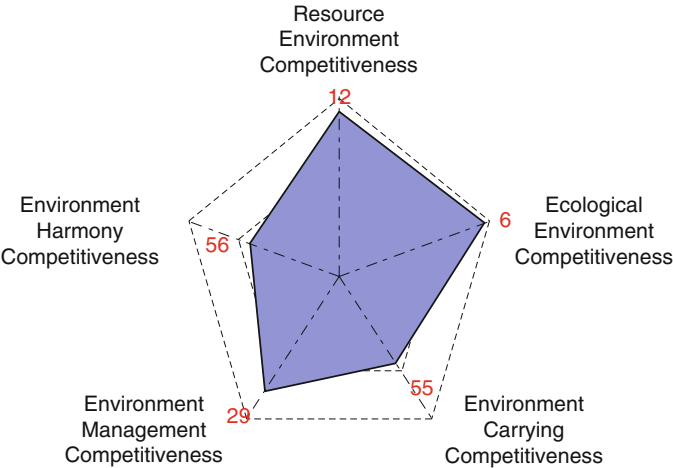


Fig. 102.2 Rank of sub-index of GEC

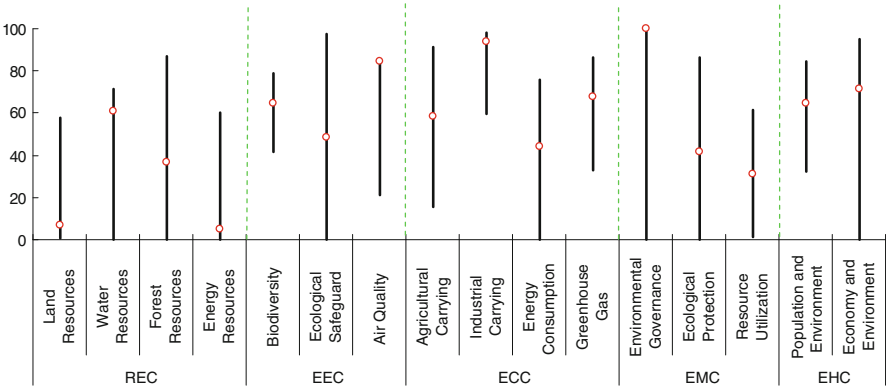


Fig. 102.3 Score and rank of the pillars of GEC

Table 102.1 Score and rank of all indicators of GEC

Indicators	Score	Rank	Indicators	Score	Rank
1 Resource Environment Competitiveness	28.57	12	Groundwater	N/A	N/A
1.1 Land Resources	6.66	110	Total internal renewable water resources	62.63	12
Land area per capita	10.75	24	1.3 Forest Resources	36.88	35
Percentage of arable land to total land area	2.87	119	Growing stock in forest and other wooded land	60.87	14
Arable land per capita	5.00	94	Proportion of land area covered by forest	36.74	56
1.2 Water Resources	61.17	8	Forest area per capita	13.08	18
Surface water	N/A	N/A	1.4 Energy Resources	5.05	70
Annual precipitation	59.71	21			

(continued)

Table 102.1 (continued)

Indicators	Score	Rank	Indicators	Score	Rank
Fossil energy	1.79	28	Energy consumption per unit of land area	99.86	49
Energy production	3.90	26	Ratio of clean energy consumption	50.80	8
Proportion of combustible renewable and waste to total energy consumption	6.93	70	Elasticity of energy consumption	13.91	67
Net energy imports of the energy consumption	11.74	47	Elasticity of electric power consumption	11.06	48
2 Ecological Environment Competitiveness	67.58	6	3.4 Greenhouse Gas	67.83	30
2.1 Biodiversity	64.71	6	Growth rate of CO ₂ emissions	62.70	29
Threatened fish species	89.15	62	Growth rate of Methane emissions	58.22	70
Threatened mammal species	95.11	49	CO ₂ emissions per unit of land area	99.87	56
Threatened plant species	98.89	78	CO ₂ emissions per unit of energy consumption	55.69	40
GEF benefits index for biodiversity	20.20	18	4 Environment Management Competitiveness	56.11	29
2.2 Ecological Safeguard	48.24	17	4.1 Environmental Governance	100.00	1
Terrestrial protected areas	70.92	12	Agricultural chemicals regulation	100.00	1
Marine protected areas	14.21	21	Percentage of the rural population with access to an improved water source	100.00	1
2.3 Air Quality	84.25	2	Percentage of the urban population with access to an improved water source	100.00	1
Inhalable particles (PM10)	91.97	7	4.2 Ecological Protection	41.86	35
Particulate matter (PM2.5)	99.03	8	Area of plantation and afforestation	2.35	24
Index of indoor air pollution	100.00	1	Biome protect	83.90	39
Nitrogen oxides emission	66.25	91	Overfishing of fishing resources	52.50	50
Sulfur dioxide emission	40.73	59	4.3 Resource Utilization	31.22	89
3 Environment Carrying Competitiveness	67.98	55	Utilization rate of water resources	0.05	107
3.1 Agricultural Carrying	58.34	123	Percentage of total internal renewable water resources to total water resources	N/A	N/A
Cereal yield per unit of arable land	79.19	5	Percentage of agricultural land to total land area	51.58	66
Fertilizer consumption per unit of arable land	0.35	129	Percentage of fossil fuel energy consumption to total energy consumption	42.03	38
Annual freshwater withdrawals for agriculture per unit of arable land	88.54	114			
3.2 Industrial Carrying	93.76	34			
Net exports of goods as a percentage of GDP	85.39	43			
Electric power consumption per unit of value added of industry	90.38	80			
SO ₂ emissions per unit of value added of industry	99.92	33			
Annual freshwater withdrawals for industry per value added of industry	99.33	27			
3.3 Energy Consumption	43.91	15			

(continued)

Table 102.1 (continued)

Indicators	Score	Rank	Indicators	Score	Rank
5 Environment Harmony Competitiveness	68.13	56	CO ₂ emissions per capita	81.01	100
5.1 Population and Environment	64.85	99	Energy consumption per capita	68.20	106
Percentage of population with access to Improved sanitation facilities	N/A	N/A	5.2 Economy and Environment	71.41	22
Motor vehicles per 1,000 people	11.60	130	Land resource utilization efficiency	0.18	51
Renewable internal freshwater resources per capita	89.82	4	Sulfur dioxide emissions per unit of GDP	98.06	27
SO ₂ emissions per capita	91.37	90	Carbon dioxide emissions per unit of GDP	93.91	28
			Energy consumption per unit of GDP	93.48	26

Table 102.2 Rank distribution of the individual indicators of GEC

Sub-index	Number of the individual indicators	Rank 1–10	Rank 11–30	Rank 31–60	Rank 61–100	Rank 101–133
Resource Environment Competitiveness	14	1	5	2	2	2
Ecological Environment Competitiveness	11	5	2	1	3	0
Environment Carrying Competitiveness	15	2	3	5	3	2
Environment Management Competitiveness	10	3	1	2	2	1
Environment Harmony Competitiveness	10	1	3	1	3	1
Total	60	12	14	11	13	6

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